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ABSTRACT

Outcomes of a longitudinal study of the Earn and Learn program are summarized. Earn and Learn was a work-experience program initiated in 1972 as a school-based, goal-oriented program for at-risk middle school students designed to increase their self-image and school performance. Two evaluation studies were carried out. One study focused on the effects of this program on student middle school performance. A second study investigated long-term effects of Earn and Learn on high school performance. Both studies used a pretest-posttest experimental-control group design, with 44 Earn and Learn students and 35 controls, and 61 Earn and Learn students and 51 controls, respectively. Parent feedback was also sought. Overall, no differences were found between Earn and Learn and control groups for achievement test data, report card grades, tardies, suspensions, and graduation rate. Compared to controls, Earn and Learn students had fewer middle school absences and higher grades in language arts and mathematics (although not significantly different); and in high school, Earn and Learn students earned significantly more credit hours. Parents generally responded favorably to most aspects of the program. As a result of the evaluation, the program was restructured with more explicit selection criteria and redesigned work experience, community service, and career awareness components. Eighteen tables present study findings. Appendixes contain criteria for selection, a referral form, and a fact sheet on the high school grading system. (SLD)

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ED 362 602

WORK EXPERIENCE PROGRAMS FOR AT-RISK ADOLESCENTS: A COMPREHENSIVE EVALUATION OF "EARN AND LEARN"

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EXECUTIVE SUMMARY

Objective

This study summarizes the outcomes of a longitudinal study of the Earn and Learn Program, a work experience program for at-risk adolescents. Initiated in 1972, the Earn and Learn Program was a school-based, goal-oriented work experience program designed to encourage at-risk middle school students to develop a positive self image and improve school performance. Enrolled students were motivated to improve their school attendance, behavior, classwork and homework. Earn and Learn staff members worked cooperatively with students, teachers, and parents to accomplish these goals. Although earning money was not the purpose of the program, it was the incentive used to motivate students to achieve these goals. It relied on the support of the local school board, businesses, government, agencies, and the community it served.

In its early years, initial external studies of the program's short term effects showed it to be successful in improving behavior, attendance, and grades. Since the 1970's, however, the program was monitored internally by its director. The program continued to purport to be beneficial to students, demonstrating behavioral change as well as showing effectiveness as a drop-out prevention program. Parental concerns about the program's claims resulted in a request on the part of the local board of education for a formal evaluation of the effects of the program. Of particular concern were claims that the program was not serving the student population it was intended for; that is, students demonstrating poor academic performance, poor attendance or behavior problems.

Perspective

In recent years, much attention in the educational arena has been focused on the nation's at-risk adolescent youth. These are students who are chronically truant, suspended, retained, exhibit poor academic performance or misbehave in school. Research indicates that these types of students have a higher-than-average chance of dropping out. A great deal of funds have been directed toward programs designed to address the needs of such students. For example, in Illinois, special funds have been set aside for Truants Alternatives Programs -- a funding program that developed out of the state's educational reform movement in 1985. Despite these funding efforts, little evidence of program effectiveness is available, particularly for drop-out prevention programs, because few of these programs have been evaluated formally.

Methods

Two studies were carried out to evaluate the Earn and Learn Program. One study focused on the effects of this program on students' performance in middle school. The second study investigated long-term effects of Earn and Learn on students' high school performance. Both studies were based on a pretest - posttest experimental/control group design. Control groups consisted of students who were referred to Earn and Learn, but who either chose not to attend or for whom there were no program slots available. Populations were equated in terms of sex, race, and academic skills. Study one included 44 Earn and Learn students and 35 control students. Study two included 61 Earn and Learn students and 51 controls.

Data Source

Variables under study included standardized achievement test data, report card grades, absences, tardies, suspensions, credit hours and graduation rates. Parent feedback was also sought.

Results

Overall, for most variables under study, no differences were found between Earn and Learn and control groups for achievement test data, report card grades, tardies, suspensions and graduation rate. Major outcomes include:

- A significant proportion of Earn and Learn students had fewer absences than control students at the end of eighth grade.

- Earn and Learn students tended to get higher grades in language arts and mathematics in eighth grade than did a comparison group of control students but were not significantly different.

- In high school, Earn and Learn students earned significantly more credit hours at the time of graduation than control students.

- Overall, parents responded positively to most aspects of the Earn and Learn Program. Responses were least favorable with respect to communication between staff and students and the summer camp experience.

Educational Importance of the Study

Earn and Learn's stated purpose is to improve school performance by motivating students to improve school attendance, behavior, classwork and homework. Study findings suggest that Earn and Learn improved student attendance in the middle school years, but had little effect in high school. Although one of the program goals is also to improve behavior, Earn and Learn students did not enter with severe behavior problems that would be cause for suspension. The data at sixth grade indicated that only one student had been suspended in sixth grade prior to program study.

Of particular importance is whether Earn and Learn's focus on attendance, behavior, homework and classwork contributes to improved academic performance. Study results indicate that students earned more credit hours and tended to perform higher academically than controls; however, there appears to be no significant effect on achievement test scores, grades or GPA. Finally, the Earn and Learn Program does not appear to improve graduation rate or, conversely, decrease the number of dropouts as compared to control groups of students. Although Earn and Learn students enter the program with some characteristics associated with dropouts, their attendance rate is quite good, suspension rate is low and many students perform at above average levels.

As a result of these findings, the program has been restructured with more explicit selection criteria and procedures as well as a redesigned work experience and new community service and career awareness components.

WORK EXPERIENCE PROGRAMS FOR AT-RISK ADOLESCENTS: A COMPREHENSIVE EVALUATION OF "EARN AND LEARN"

PERSPECTIVE

In recent years, much attention in the educational arena has been focused on the nation's at-risk adolescent youth. These are students who are chronically truant, suspended, retained, exhibit poor academic performance or misbehave in school. Research indicates that these types of students have a higher-than-average chance of dropping out. A great deal of funds have been directed toward programs designed to address the needs of such students. For example, in Illinois, special funds have been set aside for Truants Alternatives Programs -- a funding program that developed out of the state's educational reform movement in 1985. Despite these funding efforts, little evidence of program effectiveness is available, particularly for drop-out prevention programs, because few of these programs have been evaluated formally.

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This study summarizes the outcomes of a longitudinal study of the Earn and Learn Program, a work experience program for at-risk adolescents. Initiated in 1972, the Earn and Learn Program was a school-based, goal-oriented work experience program designed to encourage at-risk middle school students to develop a positive self-image and improve school performance. Enrolled students were motivated to improve their school attendance, behavior, classwork and homework. Earn and Learn staff members worked cooperatively with students, teachers, and parents to accomplish these goals. Although earning money was not the purpose of the program, it was the incentive used to motivate students to achieve these goals. It relied on the support of the local school board, businesses, government, agencies, and the community it served.

In its early years, initial external studies of the program's short term effects showed it to be successful in improving behavior, attendance, and grades. Since the 1970's, however, the program was monitored internally by its director. The program continued to purport to be beneficial to students, demonstrating behavioral change as well as showing effectiveness as a drop-out prevention program. Parental concerns about the program's claims resulted in a request on the part of the local board of education for a formal evaluation of the effects of the program. Of particular concern were claims that the program was not serving the student population it was intended for; that is, students demonstrating poor academic performance, poor attendance or behavior problems.

METHODS

Two studies were carried out to evaluate the effects of the Earn and Learn Program. One study focused on the effects of this program on student's performance in middle school. A second study investigated long-term effects of the Earn and Learn Program on high school performance. Both studies are based on a pre/post experimental-control group design. In addition, parent feedback was solicited through the administration of a survey.

EARN AND LEARN PROGRAM DESCRIPTION

Elements of the program included:

a twelve-day summer camp experience offering a variety of activities such as camping, riding, swimming, canoeing, biking and field trips;

instruction in developing or improving problem-solving communication and stress management skills;

practice in "goal-setting;"

group counseling;

an optional half-day summer employment program;

a summer transition program and weekend camp experience for graduating eighth grade students entering high school.

The ten-month work experience included:

one hour and thirty minutes of work each day from 3:30 - 5:00 P.M.;

a pay scale of $3.00 per hour;

counseling in development of appropriate work attitudes and and behavior;

daily free transportation from school to the work site and a bus route at the end of the work day;

frequent feedback to parents via phone, home visits, conferences and written progress reports.

Parents were provided the following services:

daily phone calls from school advisors regarding homework completion

contact from Earn and Learn staff regarding work attendance and performance

group parent education meetings

social work services

In recent years, there were 5.6 budgeted FTE staff members, including a coordinator, an assistant coordinator, an aide, a secretary, a .6 social worker a .5 bus driver, and a .5 workshop supervisor. In addition, there were four advisors located at each middle school who worked one hour daily.

The program provided a supervised after-school job environment where the students earned the privilege of working for the amount of time calculated according to their performance on goals during the school day. Goals were established during the summer by each student for classwork, homework and behavior. After school began, these goals were reviewed and revised in cooperation with teachers. Earn and Learn students carried goal cards to class each day so that teachers could indicate whether or not the goals were met. At the end of the day, students presented the goal card to the Earn and Learn school advisor. An analysis of payroll records indicated that students worked on the average of four and one-half hours per week.

Historically, the Earn and Learn Program included summer camp and work experience. A homework lab was offered in more recent years. The homework lab was provided by staff at the work site.

Referral Process

Students were referred to Earn and Learn by middle school staff if they felt that student behavior, school attendance, social interaction and academic performance could be improved by involvement in the Earn and Learn program (see Appendix A for criteria). A standard referral form was used for each referred child. This form (see Appendix B) shows a list of behaviors that teachers must consider when referring a student to the Earn and Learn program. These behaviors include incomplete homework or classwork, tardiness, non-participation in class, withdrawal, inappropriate conduct and aggressiveness.

In the final analysis, it was the middle school advisor, with input from staff, who determined Earn and Learn participants; however, the manner in which referrals were solicited varied from school to school. For example, sometimes a middle school had an all-school assembly to explain the Earn and Learn Program to students. Students were asked to apply if they were interested. Teachers were also asked to make referrals. An interested student must also have been identified by middle school staff. Sometimes a school notified students of the program via the school newsletter as well as solicited referrals from teachers. The more teachers recommending a child, the more this child was given priority status as a candidate. However, middle school staff also must have identified these students as likely candidates. Once advisors reviewed referrals and identified candidates, students were requested to complete an application form and attend an interview at the work site with their parents. During this interview, program goals and expectations were discussed and a contract was signed by both parent and student.

The referral process changed over the years. At times, the process required the support staff at each school to convene and make decisions about referrals. However, this component was not required in recent years, since it was found that sometimes these staff members did not always know the students that were referred. For the most part, incoming 7th and 8th graders were considered for the program. A few incoming sixth graders were enrolled. Participants were given the option of continuing through ninth grade.

EFFECTS OF THE EARN AND LEARN PROGRAM ON STUDENTS' MIDDLE SCHOOL EXPERIENCE

The Earn and Learn Student Target Population

The population for this substudy was 44 Earn and Learn students who graduated from eighth grade either in 1988-89 or 1989-90. Students either were enrolled in Earn and Learn beginning in seventh grade or in eighth grade. Forty eight percent of this group were enrolled in Earn and Learn for both seventh and eighth grade.

Of this population, 24% were white boys, 5% were white girls, 39% were black boys and 32% were black girls. This group included students from all four middle schools in the district. Forty percent of the students were receiving some kind of special education service. In order to determine their entering characteristics prior to Earn and Learn intervention, sixth grade demographic data were analyzed. The average absence rate of this group at sixth grade was 13.5 half days per student. This rate is less than the average sixth grade absence rate which is 18.5 half days per year.

The average number of tardies for this group was 13 tardies per year, per student. Only one student of this group was suspended from school during the sixth grade year.

The following table shows the stanine distribution of sixth grade California Achievement Test Scores for these students in reading, English language and math for whom scores were available.

TABLE 1 Percent of Earn and Learn Students Scoring in Performance Groupings: Sixth Grade

	Below Average Stanines 1 - 3		Average Stanines 4-6		Above Average Stanines 7-9	
	N	%	N	%	N	%
Reading	9	28 (13%)	22	68 (50%)	1	3 (37%)
English Language	13	37 (16%)	21	60 (48%)	1	3 (36%)
Mathematics	11	31 (14%)	22	63 (53%)	2	6 (33%)

These figures indicate that approximately one-third of the Earn and Learn students performed below average as measured by a standardized achievement test. The distribution of the sixth grade population as a whole for these tests is shown in parentheses. There are between two to three times more Earn and Learn students in the below average group than the total population and far fewer in the above average group.

Average grade point average (GPA) was also computed for Earn and Learn students in their sixth grade year. GPA was computed by averaging three marking period grades for each child. Based on a scale where "0" represents a failing mark and 1, 2, 3, and 4 represents a "D," "C," "B," and "A" respectively, the average reading GPA was 1.93 (C), the average math GPA was 2.51 (C+), the average language arts GPA was 2.07 (C), the average science GPA was 1.93 (C) and the average social studies GPA was 1.64 (D+/C-).

Some of the literature about the Earn and Learn Program described this program as having been established "to identify those children at an early age who manifest school adjustment problems commonly linked with high school dropouts." Since the Earn and Learn student population was characterized as manifesting behaviors associated with potential high school dropouts, research about dropouts was reviewed to determine characteristics having a correlation with dropping out of school.

These characteristics include:

- low basic skills test performance
- low grade point average
- attendance/truancy problem
- behavior/discipline problem
- one or more years older than other students in the same grade
- special program placement
- minority status

Given these characteristics, the Earn and Learn student population matched some, but not all, of these factors. For example, Earn and Learn students generally had a low GPA and approximately one-third tested below average. A large proportion (40%) received special services and 36% were 1 - 2 years older than other students in the same grade. However, the average attendance rate was better than the district average and suspensions were not a problem. The majority of students fell in the average range on standardized tests.

Other frequently cited characteristics in the research include low socio-economic status, unstable home, abuse, low parent educational level and occupation, non-English speaking home, low self-esteem, poor school attitudes, alcohol and/or substance abuse problem, and negative police involvement. This type of information was not available for the Earn and Learn students.

Study Design

This study's purpose was to analyze the effects of the current Earn and Learn Program on students' middle school experience. It is based on a pretest-posttest experimental/control group design. As already stated, the target population was Earn and Learn students who graduated eighth grade either in 1988-89 or 1989-90. The control group consisted of students who were referred to Earn and Learn but who either chose not to attend or for whom there were no program slots available.

Measures

Numerous measures were used to analyze Earn and Learn outcomes. These measures can be categorized according to three outcome types:

1) Academic Variables including standardized achievement data and grades;

2) Academic Motivation Variables including absences and tardies;

3) Social Behavior Variables including suspensions.

Student cumulative folders, the district computer database and other central office files were used as sources to collect this information. For all measures, sixth grade data were used as pretest scores and eighth grade data were used as posttest scores.

In a study of this type, one inevitably has to deal with missing data. Sometimes test scores or other information were missing because students in the sample had previously been enrolled in another district. Sometimes report card data were incomplete. Therefore, the number of students included in each comparison varies slightly depending on the pretest/posttest data available.

Middle School Results

Results are reported according to the three types of outcome variables under study: Academic variables, academic motivation variables and social behavior variables.

Academic Variables. Two types of academic variables were analyzed: California Achievement Test (CAT) scores and grades.

Table 2 shows the average pretest/posttest scale scores on the C.A.T. of the Earn and Learn student group compared to the control group for reading, English language and mathematics. An analysis of covariance was carried out to determine if differences between the two groups were statistically significant. This technique adjusts for differences, if any, that are observed in pretest scores. Adjusted posttest scores (noted as Adj. SS) are also included in Table 2.

Table 2 Average Pre/Post Scale Scores: California Achievement Test

	Pretest			Posttest			
	N	$\bar{X}$SS	SD	$\bar{X}$SS	SD	Adj. SS	Sig.
TOTAL READING							
Earn and Learn	31	721	24	751	24	752	
Control	22	725	30	750	21	748	n.s.*
TOTAL LANGUAGE							
Earn and Learn	33	690	30	719	28	718	
Control	27	687	40	710	38	711	n.s.
TOTAL MATHEMATICS							
Earn and Learn	33	730	36	758	36	752	
Control	26	714	37	746	38	753	n.s.

In all three subject areas, there were no significant differences at the .05 level between the groups at the end of eighth grade when posttests were administered.

*n.s. group scores are not significantly different.

Table 3 shows pretest/posttest data for average GPAs based on report card grades in reading, language arts, mathematics, science and social studies. Grade point averages for each student were derived by averaging grades for the three marking periods in the sixth and eighth grade, respectively.

Table 3 Average Pre/Post Grade Point Average by Subject Area

	Pre			Posttest			
	N	XGPA	SD	XGPA	SD	Adj.GPA	Sig.
READING							
Earn and Learn	23	1.75	.89	1.93	.88	2.94	
Control	22	1.80	.94	1.73	.77	1.72	n.s.
LANGUAGE ARTS							
Earn and Learn	26	1.98	.79	1.96	.77	1.91	
Control	26	1.74	.77	1.52	.70	1.57	p = .07
MATHEMATICS							
Earn and Learn	29	2.47	.79	2.59	.84	2.44	
Control	29	1.93	.73	1.89	.88	2.04	p = .06
SCIENCE							
Earn and Learn	24	1.99	.66	2.04	.94	2.02	
Control	26	1.91	.70	1.61	.99	1.64	n.s.
SOCIAL STUDIES							
Earn and Learn	22	1.62	.91	1.68	.94	1.67	
Control	22	1.58	.86	1.54	.73	1.55	n.s.

Although there were no significant differences between the groups at the .05 alpha level, as tested by an analysis of covariance, there were trends toward significance in two subject areas -- language arts and mathematics. In language arts, the mean GPAs suggest that while Earn and Learn students maintained an average GPA of approximately a "C" average, the control group's GPA decreased from slightly under a "C" average to midway between a "D" and "C" average. For mathematics, the GPAs indicate that the control group's performance declined by .04 from pretest to posttest while the Earn and Learn group improved by .12.

Academic Motivation Variables. Table 4 shows the percent of students falling into three categories of absence types: a) those students missing school 0-10 half days; b) those students missing 11-20 half days; and c) those students missing 21 or more half days. The highest number of half days missed in this category was 56 half days (2 students for sixth grade) and 99 half days (1 student) for eighth grade. It is not possible to document whether some of these more extreme cases were due to extended sickness or truancy. The variability of the data, however, is clear.

Table 4 Percent of Students Who Were Absent in Middle School

		Pretest				Posttest			
		Number of Half Days				Number of Half Days			
	N	0-10	11-20	21 or more	Sig.	0-10	11-20	21 or more	Sig.
Earn & Learn	44	50%	25%	25%		29%	32%	39%	
Control	35	28%	26%	46%	n.s.	20%	14%	66%	p=.05

A chi square test of significance applied to absence data found no significant differences between the groups at sixth grade. However, there was a significant difference between the groups in favor of Earn and Learn at eighth grade ($X^2 = 6.02$, df = 2, p = .05). While 39% of Earn and Learn students missed 21 or more half days, representing approximately 2 or more weeks of school, two-thirds or 66% of control students missed 2 or more weeks of school. It should be pointed out that when an average half day absence rate is computed for Earn and Learn eighth grade, that figure is 21.6 which is approximately the same as the district average rate at eighth grade of 21.5.

Table 5 Percent of Students Who Were Tardy

		Pretest				Posttest			
		Number of Tardies				Number of Tardies			
	N	2 or less	From 3-12	13 or more	Sig.	2 or less	From 3-12	13 or more	Sig.
Earn & Learn	35	31%	29%	40%		9%	40%	51%	
Control	32	37%	41%	22%	n.s.	16%	37%	47%	n.s.

Table 5 shows the percentage of students falling into three categories of tardy types: a) those students tardy 2 times or less; b) those students tardy from 3 to 12 times, and c) those students tardy more than 12 times. The highest number of tardies was 75 at sixth grade and 74 at eighth grade. A chi square showed no significant differences between the groups at pretest and posttest.

Social Behavior Variables. Suspension data were also analyzed. Table 6 shows these data. With one exception, no students in the control and Earn and Learn groups were suspended in sixth grade. In eighth grade, differences between groups as assessed by means of a chi square test were not significant; that is, approximately 12 percent of both the Earn and Learn and control groups had been suspended one to two times.

Table 6 Percent of Students Suspended, 0, 1, or 2 Times

		Pretest				Posttest			
		Number of Suspensions			Sig.	Number of Suspensions			Sig.
	N	0	1	2		0	1	2	
Earn and Learn	43	98%	2%	0%		89%	9%	2%	
Control	39	100%	0%	0%	n.s.	87%	10%	3%	n.s.

Achievement of Target Goals. For the 1990 eighth graders in this study, data were available to analyze achievement of target goals. Since control students were not part of the program, this analysis only includes Earn and Learn students. Five target goals (e.g., homework completion, on time for class, etc.) were identified and agreed upon by each middle school student and his/her teachers. Daily records of the extent to which each participant exhibited the desired behaviors were kept and were used to determine if the student was to participate in the Earn and Learn activities each day. Daily records were relayed to the computer center and cumulative records of the percents of goal attainment for each participant were derived.

Table 7 is a frequency distribution of the percent of time that goals were met by the program participants.

Table 7 Frequency Distribution of Percent of Goal Attainment By Eighth Graders, Earn and Learn - 1989-90

% of Time	N	%
0 - 9	0	0
10 -19	0	0
20 -29	0	0
30 -39	0	0
40 -49	1	4.55
50 -59	1	4.55
60 -69	4	18.18
70 -79	6	27.27
80 -89	1	4.55
90-100	9	40.90

Number of Goals: 110
Number of Students: 22

Of the 22 students for whom data were available, 41% of the goals were exhibited from 90-100% of the time, 5% from 80-89% of the time and 27% from 70-79% of the time. Seventy-three percent of the goals were attained from 70 to 100% of the time.

LONG-TERM EFFECTS OF THE EARN AND LEARN PROGRAM ON HIGH SCHOOL PERFORMANCE

Study Design

This substudy's purpose was to investigate the long-term effects of the Earn and Learn program on high school performance. It is based on a pretest-postest experimental/control group design. The target population for this substudy was 61 Earn and Learn students who graduated from eighth grade between 1984 and 1986, representing the high school graduating classes of 1987-88, 1988-89 and 1989-90. Students were either enrolled in Earn and Learn beginning in seventh grade or in eighth grade. Fifty-nine percent continued in Earn and Learn as freshmen. Of this population, 26% were white boys, 11% were white girls, 31% were black boys, 28% were black girls, 2% (n=1) were Asian boys and 2% (n=1) were Hispanic boys. It should be noted that this Earn and Learn group had 8% more non-minority students than the more recent target group in substudy 1. This group represents students from all four middle schools.

The control group consisted of students who were referred to Earn and Learn, but who either chose not to attend or for whom there were no program slots available.

Comparability of groups prior to intervention was assessed by means of a *t* test on measures of reading, English language, mathematics and absence rate. There were no significant differences between the groups in subject areas although the means of the Earn and Learn group tended to be slightly higher than the control group. Both the Earn and Learn and control group were comparable in terms of sex/race characteristics.

Measures

Similar to the first substudy, the measures for this second substudy also can be categorized according to three outcome types:

1) Academic Variables including standardized achievement data, English grades, credits, GPA and GPA percentile.

2) Academic Motivation Variables including absences and graduation rate.

3) Social Behavior Variables including suspensions.

The district computer database, central office files, and Earn and Learn files were used as sources to collect this information. Data were also collected from the high school with assistance from the Data Processing Department, the Office of the Registrar and Information Services.

Longitudinal Findings

Academic Variables. Although the focus of this substudy is on the longitudinal effects of Earn and Learn on high school performance, achievement test data from eighth grade were available. Therefore, these data were analyzed along with high school information.

Table 8 shows sixth and eighth grade C.A.T. achievement test data for reading, English language and mathematics. An analysis of covariance was used to compare group means after any adjustment for differences between the groups. There were no significant differences between the groups.

Table 8 Average Pre/Post Scale Scores: California Achievement Test

	Pretest			Posttest			
	N	$\bar{X}$SS	SD	$\bar{X}$SS	SD	Adj.SS	Sig.
				READING			
Earn and Learn	61	493	60	554	66	549	
Control	51	480	50	538	64	545	n.s.
				ENGLISH LANGUAGE			
Earn and Learn	61	506	50	563	60	561	
Control	50	501	51	565	64	567	n.s.
				MATHEMATICS			
Earn and Learn	61	487	42	547	57	542	
Control	50	473	40	534	59	541	n.s.

Table 9 shows data from the Degrees of Reading Power (DRP), which is a standardized achievement test in reading administered to high school students at the end of their freshman year. The class of 1988 is not included in this analysis because the DRP was not administered to this group of students. The DRP provides scores in terms of Normal Curve Equivalents (NCE's) which range from 1 to 99 with 50 representing the national norm. Since a reading pretest score was available (the C.A.T reading subtest score at sixth grade), an analysis of covariance was used to adjust posttest scores for any pretest differences. No significant differences were found between the groups.

Table 9 Average Normal Curve Equivalents for Degrees of Reading Power Test

	N	$\bar{X}$NCE	SD	Adj.NCE	Sig.
Earn and Learn	30	58	16	55	
Control	29	51	15	54	n.s.

Table 10 provides data on students' average English grades in each of four high school years. English grades were analyzed because all students must take English from freshman to senior year. While GPA can only be used to compare students who graduated, analysis of English grades allows for analyzing students who may not have attended for all four years but were present one or more years. Grades range from "A" to "F" with point values ranging from 5.0 to 0.0. See Appendix C for definitions of point values. Although average GPAs are slightly higher for the Earn and Learn group, it must be remembered that, in general, the Earn and Learn group tended to be higher on C.A.T. scores at the pretest but not significantly so. No significant differences were found for any of the high school English GPAs as measured by a Mann-Whitney U test. This statistic was used because of certain characteristics of the English GPA data which did not lend itself to a t test. This test assigns a mean rank to each group and evaluates the difference. These ranks are reported in Table 10.

Table 10 Average Grade Point Average and Mean Rank: High School English

	N	$\bar{X}$GPA	SD	$\bar{X}$ Rank	
FRESHMAN ENGLISH					
Earn and Learn	57	2.00	.85	54.21	
Control	49	1.89	.84	52.67	n.s.
SOPHOMORE ENGLISH					
Earn and Learn	54	1.94	.79	54.96	
Control	47	1.64	.97	46.45	n.s.
JUNIOR ENGLISH					
Earn and Learn	49	1.69	.91	47.35	
Control	41	1.48	.86	43.29	n.s.
SENIOR ENGLISH					
Earn and Learn	44	1.84	.75	43.38	
Control	39	1.78	.74	40.45	n.s.

For those students who graduated, credit hours, GPA, and GPA percentile were analyzed. Table 11 shows credit hour data. The average number of credit hours for Earn and Learn students was 50.02 while control group students accumulated 47.38 credit hours. A t test found significant differences between the groups in favor of Earn and Learn ($t = 2.31$, $df = 75$, $p = .01$). Earn and Learn students had more credit hours accumulated at graduation than control students.

Table 11 Average Number of High School Credit Hours

	N	$\bar{X}$ Credit Hours	SD	Sig.
Earn and Learn	45	50.02	5.31	
Control	32	47.38	4.32	p = .01

In Table 12, GPA data are summarized.

The average GPA for both Earn and Learn and control group students represents a "C" average and are not statistically different (t test).

Table 12 Average High School Grade Point Average

	N	$\bar{X}$GPA	SD	Sig.
Earn and Learn	45	2.08	.52	
Control	32	1.98	.52	n.s.

The high school also assigns a percentile rank to each student's GPA. For example, for the class of 1989, a GPA of 2.27 was at the 26th percentile or, a student with that GPA performed better than 26% of his/her class. The distribution of percentile ranks is shown in Table 13. Two-thirds or more of students in both groups graduated in the bottom quarter of their class. A chi square test showed no significant differences between the groups.

Table 13 Percent of Students in Each High School GPA Quartile

	N	1-24 %ile	24-49 %ile	50-74 %ile	75-99 %ile	Sig.
Earn and Learn	45	67%	29%	4%	0	
Control	31	71%	23%	6%	0	n.s.

Academic Motivation Variables. Two types of academic motivation variables were investigated: absence rate and graduation/dropout rate. Since eighth grade data were also available, it is reported here along with high school data. Table 14 shows the percentage of students falling into three absence categories for middle school: a) those students missing 0-10 half day absences; b) those students missing 11-20 half days; and c) those students missing 21 or more half days.

Table 14 Percent of Students Who Were Absent in Middle School

	N	Number of Half Days			Sig.
		0-10 half days	11-20 half days	21 or more half days	
Earn & Learn	59	34%	25%	41%	p = .009
Control	51	10%	29%	61%	

There was a significant difference between the groups as measured by a chi square test ($X^2 = 9.36$, df = 2, p = .009). A greater number of control students were absent for 21 days or more compared to Earn and Learn students.

Table 15 shows the percent of students falling into three absence categories while in high school. Although in eighth grade, there was a difference between Earn and Learn and control students, there were no significant differences in absences during high school years.

Table 15 Percent of Students Absent Half Days in High School

	N	Number of Half Days: 0-10 half days	11-20 half days	21 or more half days	Sig.
			FRESHMAN YEAR		
Earn and Learn	54	39%	26%	35%	
Control	46	24%	35%	41%	n.s.
			SOPHOMORE YEAR		
Earn and Learn	50	32%	22%	46%	
Control	43	16%	28%	56%	n.s.
			JUNIOR YEAR		
Earn and Learn	40	32%	23%	45%	
Control	35	23%	29%	48%	n.s.
			SENIOR YEAR		
Earn and Learn	34	32%	12%	56%	
Control	27	22%	30%	48%	n.s.

Graduation rate was also evaluated. Graduation is explained in the literature on dropouts as those students of a given cohort who graduated as compared to those students who dropped out. Students who transferred to another school are not considered dropouts. Table 16 shows the percentage of students who graduated from the cohorts (classes) of 1988, 1989 and 1990 in contrast to those who dropped out. This analysis excluded students who transferred to another school or who were still enrolled at the high school at the time of data collection. No significant differences between the groups were found by means of a chi square test. Approximately 80 percent of both groups graduated from high school; the overall high school rate for the most recent graduating classes is 92%. Looking at the data relative to dropouts, then, approximately twice as many Earn and Learn students dropped out as compared to the overall high school rate (17% vs. 8%).

Table 16 Percent of Students by Graduation/Dropout Category

	N	Graduates	Dropouts	Sig.
Earn and Learn	54	83%	17%	
Control	40	80%	20%	n.s.

Social Behavioral Variables. Table 17 shows the percentage of students receiving suspensions in each of the years they were enrolled at the high school. Between 13% and 22% of Earn and Learn students received suspensions; between 11% and 20% of control students were given suspensions. For students who were suspended, the number of suspensions ranged from 1 to 11. A chi square test found no significant differences.

Table 17 Percent of Students by Suspension Category

	N	0 Suspensions	1 or more Suspensions	Sig.
		FRESHMAN YEAR		
Earn and Learn	56	84%	16%	
Control	46	80%	20%	n.s.
		SOPHOMORE YEAR		
Earn and Learn	52	87%	13%	
Control	43	74%	26%	n.s.
		JUNIOR YEAR		
Earn and Learn	41	78%	22%	
Control	35	89%	11%	n.s.
		SENIOR YEAR		
Earn and Learn	33	100%	0%	
Control	26	100%	0%	n.s.

PARENT FEEDBACK ABOUT EARN AND LEARN

Along with student data, feedback from parents was solicited. For this part of the study, Earn and Learn parents were surveyed regarding their attitudes about this program. At parent meetings in February and April, 1991, questionnaires were distributed to parents of the ninth graders and middle school students, respectively. Questionnaires were mailed to those who were not present at these meetings. A 19% response rate was obtained for middle school parents. The results of this middle school survey should be interpreted with caution due to the low response rate. An 82% response rate was obtained for parents of high school students. The children of some of these parents are part of the study on middle school effects.

The distribution of responses on a four point scale, from "strongly disagree" to "strongly agree" as well as the average score for each item are shown in Table 18.

Feedback from parents of current middle school students

Overall, with the exception of two questions, 50% or more of parents selected either agree or strongly agree throughout the survey. Parents indicated the most dissatisfaction (disagree or strongly disagree) for item 3 and item 22d: staff response to student behavior (54%) and the importance of summer camp (73%). The parents were asked to evaluate three major areas of the Earn and Learn Program; (1) staff, (2) program administration, and (3) program services. The most positive responses occurred within the area of Program Services; 50% to 92% responded on the high end of the scale.

Staff. Responses to questions pertaining to Staff indicated parents feel most positive in the area of communication between themselves and the work site staff. Seventy-five percent of the parents indicated satisfaction with the ways in which their child's progress is reported to them; 67% felt that concerns about their child are communicated to them in a timely manner. Parents were less positive toward the staff's role at the work site, in regard to such things as the staff helping to create a positive atmosphere (50%) and the response of staff to student behavior (45%).

Program Administration. The parents' responses in the area of Program Administration were distributed mostly under agree or disagree, with few responses at either end of the scale. Sixty-four percent of the parents felt that administrators are receptive to their concerns while only 50% felt that administrators are consistent and fair in dealing with student behavior.

Program Services. Parents provided the most positive responses to the portion of the survey that focused on Program Services. Parents seemed particularly pleased with four areas: feeling that the program motivates students to improve in school (92%), feeling welcome at the work site (92%), feeling the parent meetings are helpful (91%) and feeling satisfied with Earn and Learn social work services (88%). Parents seemed less satisfied with their child's experience in summer camp (66%). Half of them did not necessarily feel that the program improved school attendance.

Table 18 Earn and Learn Parent Questionnaire Results

Percent Responding

Staff		Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4	Average Score	N
1. I feel that the Earn and Learn staff responds to my child's needs.	M.S.:*	0	46	36	18	2.73	11
	H.S.:**	14	14	36	36	2.93	14
2. I feel the staff helps to create a positive atmosphere at the work site.	M.S.:	0	50	42	8	2.58	12
	H.S.:	14	7	43	36	3.00	14
3. I feel the staff responds appropriately to student behavior at the work site.	M.S.:	18	36	27	18	2.45	11
	H.S.:	7	29	21	43	3.00	14
4. I am satisfied with the ways in which my child's progress is reported to me.	M.S.:	0	25	58	17	2.91	12
	H.S.:	8	8	46	38	3.15	13
5. I feel the work site staff promptly communicates concerns to me about my child.	M.S.:	8	25	50	17	2.75	12
	H.S.:	7	14	50	29	3.00	14

Program Administration		Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4	Average Score	N
6. I feel that the program director provides positive leadership within Earn and Learn.	M.S.:	9	36	46	9	2.55	11
	H.S.:	14	14	36	36	2.93	14
7 I feel that the Earn & Learn administrators are consistent and fair in dealing with student behavior.	M.S.:	0	50	42	8	2.58	12
	H.S.:	21	14	43	21	2.64	14
8. I feel that the Earn & Learn administrators are viewed as approachable by my child.	M.S.:	18	27	36	18	2.55	11
	H.S.:	14	14	36	36	2.93	14
9. I feel the Earn & Learn administrators are receptive to my concerns.	M.S.:	0	36	55	9	2.73	11
	H.S.:	14	14	36	36	2.93	14

* M.S. = Responses from parents with children in middle school
** H.S. = Responses from parents with children in ninth grade at the high school

Earn and Learn Parent Questionnaire Results

Program Services		Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4	Average Score	N
10. I understand the policies and procedures that my child is expected to follow.	M.S.:	8	8	75	8	2.83	12
	H.S.:	15	15	31	38	2.92	13
11. I feel welcome at the Earn and Learn work site.	M.S.:	0	8	75	17	3.08	12
	H.S.:	23	8	15	54	3.00	13
12. I feel comfortable at Earn and Learn parent activities.	M.S.:	0	22	67	11	2.89	9
	H.S.:	8	8	38	46	3.23	13
13. I am satisfied with the student bus service.	M.S.:	8	17	67	8	2.75	12
	H.S.:	8	8	33	50	3.25	12
14. I feel the parent meetings are helpful.	M.S.:	8	0	58	33	3.17	12
	H.S.:	8	8	25	58	3.33	12
15. I am satisfied with my child's experience at summer camp.	M.S.:	33	11	33	22	2.44	9
	H.S.:	31	0	31	38	2.77	13
16. I am satisfied with the Earn and Learn social work services.	M.S.:	0	12	38	50	3.38	8
	H.S.:	8	0	38	54	3.38	13
17. I feel the program challenges and motivates my child to improve in school.	M.S.:	0	8	42	50	3.42	12
	H.S.:	23	8	8	62	3.08	13
18. I feel Earn and Learn has helped my child to improve school behavior.	M.S.:	0	25	58	17	2.92	12
	H.S.:	8	25	17	50	3.08	12
19. I feel Earn and Learn has helped my child to improve his/her school attendance.	M.S.:	10	40	20	30	2.70	10
	H.S.:	9	18	9	64	3.27	11
20. I feel Earn and Learn has helped my child to complete more homework.	M.S.:	9	9	55	27	3.00	11
	H.S.:	25	8	8	58	3.00	12
21. I am satisfied with my child's Earn and Learn experience.	M.S.:	0	25	50	25	3.00	12
	H.S.:	8	23	23	46	3.08	13

Earn and Learn Parent Questionnaire Results

		Not at all Important 1	Somewhat Important 2	Important 3	Very Important 4	Average Score	N
22. Please rate the following:							
a) Work component	M.S.:	9	27	18	46	3.00	11
	H.S.:	0	0	38	62	3.62	13
b) Homework lab	M.S.:	0	9	18	73	3.64	11
	H.S.:	0	0	31	69	3.69	13
c) Student contact with middle school advisors	M.S.:	0	8	17	75	3.67	12
	H.S.:	0	0	38	62	3.62	13
d) Summer camp	M.S.:	46	27	27	0	1.82	11
	H.S.:	15	31	31	23	2.62	13

Parents were also asked to rate four components of Earn and Learn on a four point scale from "Not at all Important" to "Very Important." The majority of parents rated the first three components as important or very important: work component (64%), homework lab (91%) and student contact with middle school advisors (92%).

Summer camp, however, was rated less favorably with no parent feeling it was very important and 73% feeling it was either not at all or somewhat important.

Parents were also asked some open-ended questions. The comments in regard to the benefits of Earn and Learn were as follows:

- "Motivation to do all their homework and to improve their grades."
- "A sense of accomplishment."
- "It lets them know that there are some people who care about their performance."
- "Working with others/team building; learning to respect authority; discipline; pay - responsibility for own decisions, helps set priorities, gives them a taste of real life."

In response to how Earn and Learn can be improved, most parents felt that the philosophy of the program itself is quite good, but that it is not being implemented properly:

- "Earn and Learn can be helpful, if the business of the children is taken care of."
- "Concept <u>good</u>, not being worked properly."
- "Follow the original guidelines set and really work to motivate the children."
- "I don't see much evidence of <u>Earning</u> to learn. I get the impression that the work and pay overshadow the whole objective of Earn and Learn which is to promote the institution of education."

The only comment under program services was:

- "I do not think summer camp should be mandatory!"

Feedback from Parents of Students in Ninth Grade

Overall, with the exception of one question, 64% or more of parents selected either agree or strongly agree throughout the survey. Parents responded somewhat less positively (disagree or strongly disagree) to three items: staff response to student behavior (36%), administrators' consistency in dealing with student behavior (35%) and summer camp (46%). Parents were asked to evaluate three major areas of Earn and Learn: Staff, Program Administration and Program Services. The most positive responses were with respect to Program Services. From 66% to 92% responded at the high end of the scale.

Staff. Responses to questions pertaining to Staff were very positive in all areas. Parents felt most positive with the ways in which their child's progress (84%) and concerns regarding their child (79%) were reported to them, and with the way the staff creates a positive work atmosphere (79%). Parents seemed less satisfied with the way staff responds to student behavior at the work site, with 36% indicating they disagreed or strongly disagreed with how appropriately staff responds.

Program Administration. Under Program Administration, the overall response, while remaining positive, was less so than the responses in other sections of the survey. Seventy-two percent of parents felt that the Program Director provides positive leadership within Earn and Learn, that the Earn and Learn administrators are viewed as approachable by their child as well as being receptive to parent concerns. Two-thirds of parents felt administrators are consistent and fair in dealing with student behavior.

Program Services. Parent responses to Program Services were most positive in four areas: 92% were satisfied with the Earn and Learn social work services, 84% felt comfortable at Earn and Learn parent activities, 83% felt the parent meetings were helpful and 83% were satisfied with the student bus service. There were two areas in which the responses were less than 80%. Sixty-six percent of parents felt Earn and Learn has helped their child to complete more homework and 67% felt Earn and Learn has helped their child to improve school behavior.

When asked to rate the four components of Earn and Learn (on a four point scale from "Not at all Important" to "Very Important"), all parents (100%) felt that the first three components, work component, homework lab and student contact with middle school advisors, were important or very important. The fourth component, summer camp, was rated much less favorably with only 54% feeling it was important or very important.

When asked how the Earn and Learn Program can be improved, responses were:

- "Focus more on kids adjustment and coping than on trying to change parents."
- "It could be expanded."

Parents reported that the benefits of Earn and Learn Program for students were:

- "Help with behavior"
- "Improved self-esteem"
- "Improved self-discipline"
- "Learning to be more responsible"
- "Learning that work, etc. is rewarded"
- "Develop self-confidence"
- "Growth"
- "Earn and Learn program has helped my sons with their grades and attendance"
- "Help them in school"

SUMMARY OF FINDINGS

Two studies were carried out to evaluate the Earn and Learn program. One study focused on the effects of this program on students' performance in middle school. The second study investigated long-term effects of Earn and Learn on students' high school performance. Variables under study included standardized achievement data, report card grades, absences, tardies, suspensions, credit hours and graduation rate. Parent feedback about the Earn and Learn Program was also sought. Statistical techniques of group comparison and pre/post testing were used to determine effects of the program.

Overall, for most variables under study, no differences were found between Earn and Learn and control groups for achievement test data, report card grades, tardies, suspensions and graduation rate. Major outcomes were:

- A significant proportion of Earn and Learn students had fewer absences than control students at the end of eighth grade.

- Earn and Learn students tended to get higher grades in language arts and mathematics in eighth grade than a comparison group of control students but were not significantly different.

- In high school, Earn and Learn students earn significantly more credit hours at the time of graduation than control students.

- Overall, parents responded positively to most aspects of the Earn and Learn Program. Responses were least favorable with respect to communication between staff and students and the summer camp experience.

CONCLUSIONS AND IMPLICATIONS

Earn and Learn's stated purpose is to improve school performance by motivating students to improve school attendance, behavior, classwork and homework. Study findings suggest that Earn and Learn improved student attendance in the middle school years, but had little effect in high school. Although one of the program goals is also to improve behavior, Earn and Learn students did not enter with severe behavior problems that would be cause for suspension. The data at sixth grade indicated that only one student had been suspended in sixth grade prior to program study.

Of particular importance is whether Earn and Learn's focus on attendance, behavior, homework and classwork contributes to improved academic performance. Study results indicate that students earned more credit hours and tended to perform higher academically than controls; however, there appears to be no significant effect on achievement test scores, grades or GPA. Finally, the Earn and Learn Program does not appear to improve graduation rate or, conversely, decrease the number of dropouts as compared to control groups of students. Although Earn and Learn students enter the program with some characteristics associated with dropouts, their attendance rate is quite good, suspension rate is low and many students perform at above average levels.

As a result of these findings, the program has been restructured with more explicit selection criteria and procedures as well as a redesigned work experience and new community service and career awareness components.

APPENDIX A

CRITERIA FOR SELECTING STUDENT PARTICIPANTS
IN EARN AND LEARN

(As printed in Program Handout)

When a child needs assistance in relating to a child or in enabling a child to benefit from instructional activities, a number of district resource persons are available for consultation: fellow teachers, administrators, special services and ancillary personnel.

If these initial consultations are not sufficient to improve the situation and it is the professional judgement of the staff that the situation calls for some special intervention, the school counselor in consultation with appropriate special services personnel or the entire "Intake" team[1] evaluates the alternatives available and appropriate to meet the needs of the child. Earn and Learn is one of these alternatives. While the stimuli for evaluating a situation vary, (repeated confrontations with peers and teachers, self initiated withdrawal from the group, unwillingness to make consistent attempts to learn), the criterion for recommending that a student participate in the Earn and Learn program is the staff interpretation that the student needs a systematic incentive program within a group setting in order to gain a new orientation and level of personal integration. A record of the recommendations resulting from the consultations or Intake evaluations is maintained by the school counselor/coordinator.

Once selected for the program, a specific set of student behavioral goals are defined by the teachers and reviewed with the student and parents before participation can begin. Criteria for evaluating goal accomplishment are derived for each of the target behaviors.

Evaluation of goal accomplishment is a continuous process, initiated and monitored by the counselor/coordinator. Teachers are asked to select new goals for participants when a high level of success is achieved.[2]

In selecting children to participate in the program, the existing race and sex composition of the program is taken into consideration so that segregation by race or sex will be avoided. An attempt is made to have an even number of seventh and eighth graders. Some sixth graders are accepted under special circumstances. A criterion describing an acceptable student participant/staff ratio has not been established to date, since the allocation of space for project activities is a present limitation.

1 Multidisciplinary team that operates at each school, meeting regularly, for the purpose of dealing with staff concerns regarding individual students.

2 90% success over a tri-semester.

REFERRAL FOR EARN AND LEARN

APPENDIX B

Please complete and return to Earn and Learn Advisor _____

Date _____

Student's Name _____ School _____

Race _____ Sex ____ Grade and Section _____

Homeroom Teacher _____ Referring Person _____
Position _____

Place a check (x) next to those behaviors frequently exhibited by student.

____ Incomplete homework
____ Incomplete classwork
____ Tardy to class
____ Tardy to school
____ Missing materials for class
____ Inappropriate conversation in class
____ Disruptive movements in class
____ Does not participate in class activities and/or discussion
____ Does not follow directions
____ Does not pay attention in class
____ Seeks inappropriate attention from adults
____ Seeks inappropriate attention from peers
____ Withdraws from peers
____ Problems relating with peers
____ Problems relating with adults
____ Aggression toward objects
____ Aggression toward peers
____ Aggression toward adults
____ Denies responsibility for actions
____ Preoccupied with family problems

Please describe: _____

_____

_____

_____

APPENDIX C

HIGH SCHOOL GRADING SYSTEM

A Message to Parents

Student Progress Reports are prepared four times each year. These reports are supplemented by other correspondence whenever we believe additional information should be shared with you.

You may obtain additional information anytime by consulting with individual teachers or with your student's counselor. Your counselor's name and telephone number appear on the Student Progress Report.

Current and cumulative credits and grade point averages appear on first semester and second semester reports only.

Grade point average (GPA) is determined by averaging semester marks of A, A−, B+, B, B−, C+, C, C−, D+, D, F, and I for all ETHS courses carrying one or more than one credit, except physical education. Point values are listed under Marking Symbols. Honors marks are weighted by adding 0.5 point; advanced placement marks are weighted by adding 1.0 point.

Marking Symbols

SYMBOL	DEFINITION	VALUE	SYMBOL	DEFINITION	VALUE
A	Superior	4.0	I	Incomplete	0.0
A−	Superior	3.7	P	Pass in Pass/Fail Course	Credit
B+	Excellent	3.3	PF	Fail in Pass/Fail Course	NA
B	Excellent	3.0	EX	Medical Excuse - Physical Education	NA
B−	Excellent	2.7	AD	Audit - Not for Credit	NA
C+	Average	2.3	LA	Late Entrant - A	NA
C	Average	2.0	LB	Late Entrant - B	NA
C−	Average	1.7	LC	Late Entrant - C	NA
D+	Below Average	1.3	LD	Late Entrant - D	NA
D	Below Average	1.0	LF	Late Entrant - Failed	NA
F	Failed*	0.0			

* In order for a student to receive a grade of F in a system that has different groups for ability and achievement, the reason for the F should be clearly known. The F grade must be explained.

F1	Lack of attendance
F2	Failure to turn in required work or homework
F3	Too difficult for the student
F4	Other - narrative to parents

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References

Clark, Terry, "Preventing School Dropouts: What can Be Done?" Citizens Budget Commission Quarterly, Vol. 7, No. 4 (Fall, 1987)

Frazer, Linda, "Students At Risk of Dropping Out: Developing Accurate Criteria to Identify Them," ERS Spectrum, Vol. 10, No. 4 (Fall, 1992), pp. 3 - 9

Ligon, Glynn, Stewart, Bridget, and Wilkinson, David "Making Dropout Rates Comparable: An Analysis of Definitions and Formulas," ERS Research Digest (June, 1990) pp. 3 - 14